AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior listing of claims in this application.

1. (Currently amended) A method of forming a flash memory cell, comprising:

forming a tunnel oxide on a substrate;

forming a first conductor layer over said tunnel oxide;

forming an insulating layer over said first conductor layer, said insulating layer comprising a first oxide layer over said first conductor layer, a nitride layer over said first oxide layer, and a second oxide layer over said nitride layer, said second oxide layer grown by oxidizing said nitride layer with a gas ambient containing atomic oxygen, wherein said second oxide layer is formed to have a thickness of at least 60% of the targeted thickness of the second oxide layer~~, and wherein said second oxide layer is formed to a thickness of about 20 Å – 80 Å with an in-situ steam generation process~~;

forming a second conductor layer over said insulating layer;

etching at least said first conductor layer, said second conductor layer and said insulating layer, thereby defining at least one stacked gate structure; and

forming a source region and a drain region in said substrate on an opposite side of said stacked gate structure, thereby forming at least one memory cell.

2. (Original) The method of claim 1 wherein said second oxide layer is grown at a temperature of about 850°C to about 1100°C.

3. (Original) The method of claim 1 wherein said second oxide layer is grown at a temperature of less than about 900°C.

Claims 4-5 (Canceled).

6. (Original) The method of claim 1 wherein said atomic oxygen is supplied by in situ steam generation.

7. (Original) The method of claim 1 wherein said atomic oxygen is supplied by ozone source.

8. (Original) The method of claim 1 wherein said atomic oxygen is supplied by plasma source.

9. (Original) The method of claim 1 wherein said atomic oxygen is supplied by microwave source.

10. (Original) The method of claim 1 wherein said atomic oxygen is supplied by photoexcitation.

11. (Original) The method of claim 1 wherein said second oxide layer is formed in a single wafer system.

12. (Original) The method of claim 1 wherein said second oxide layer is formed in a batch furnace system.

13. (Original) The method of claim 1 wherein said second oxide layer is formed in a rapid thermal system.

14. (Original) The method of claim 1 wherein said second oxide layer is formed in a fast ramp system.

15. (Canceled).

16. (Currently amended) A method of forming an ONO insulating structure, comprising:

depositing a first oxide layer over an integrated circuit structure;

depositing a nitride layer over said first oxide layer; and

growing a second oxide layer over said nitride layer wherein said second oxide layer is grown at a temperature of about 850°C to about 1100°C, for about 1 second to about 10 minutes, using a gas ambient containing atomic oxygen, wherein said second oxide layer is formed to have a thickness of at least 60% of the targeted thickness of the second oxide layer ~~about 20 Å – 80 Å with an in-situ steam generation process~~.

17. (Canceled).

18. (Original) The method of claim 16 wherein said second oxide layer is grow at a temperature of less than about 900°C.

Claims 19-20 (Canceled).

21. (Original) The method of claim 16 wherein said atomic oxygen is supplied by in situ steam generation.

22. (Original) The method of claim 16 wherein said atomic oxygen is supplied by ozone source.

23. (Original) The method of claim 16 wherein said atomic oxygen is supplied by plasma source.

24. (Original) The method of claim 16 wherein said atomic oxygen is supplied by microwave source.

25. (Original) The method of claim 16 wherein said atomic oxygen is supplied by photoexcitation.

26. (Original) The method of claim 16 wherein said second oxide layer is formed in a single wafer system.

27. (Original) The method of claim 16 wherein said second oxide layer is formed in a batch furnace system.

28. (Original) The method of claim 16 wherein said second oxide layer is formed in a rapid thermal system.

29. (Original) The method of claim 16 wherein said second oxide layer is formed in a fast ramp system.

30. (Canceled)

31. (Currently amended) A method of forming a flash memory array containing a plurality of flash memory cells, each of said plurality of flash memory cells being formed by the acts of:

forming a tunnel oxide on a substrate;

forming a first conductor layer over said tunnel oxide;

forming an insulating layer over said first conductor layer, said insulating layer comprising a first oxide layer over said first conductor layer, a nitride layer over said first oxide layer, and a second oxide layer over said nitride layer, wherein said second oxide layer is grown in the presence of atomic oxygen at a temperature of less than about 900°C for a period of about 1 second to 10 minutes, and wherein said second oxide layer is formed to at least about 60% of a targeted thickness of said second oxide layer ~~with an in situ steam generation process~~;

forming a second conductor layer over said insulating layer;

etching at least said first conductor layer, said second conductor layer and said insulating layer, thereby defining at least one stacked gate structure; and

forming a source region and a drain region in said substrate, thereby forming at least one memory cell.

Claims 32-35 (Canceled).

36. (Original) The method of claim 31 wherein said atomic oxygen is supplied by in situ steam generation.

37. (Original) The method of claim 31 wherein said atomic oxygen is supplied by ozone source.

38. (Original) The method of claim 31 wherein said atomic oxygen is supplied by plasma source.

39. (Original) The method of claim 31 wherein said atomic oxygen is supplied by microwave source.

40. (Original) The method of claim 31 wherein said atomic oxygen is supplied by photoexcitation.

41. (Original) The method of claim 31 wherein said second oxide layer is formed in a single wafer system.

42. (Original) The method of claim 31 wherein said second oxide layer is formed in a batch furnace system.

43. (Original) The method of claim 31 wherein said second oxide layer is formed in a rapid thermal system.

44. (Original) The method of claim 31 wherein said second oxide layer is formed in a fast ramp system.

45. (Original) The method of claim 31 wherein said second oxide layer is formed to a thickness of about 20 Å – 80 Å.

Claims 46-51 (Canceled).